

(1848), when, in reference to the classification of winds, he says:—

“I suggest that we might for this last class of circular, or highly curved winds, adopt the term ‘cyclone,’ from the Greek *κυκλος* (which signifies, amongst other things, the coil of a snake), as neither affirming the circle to be a true one, though the circuit may be complete, yet expressing sufficiently the tendency to circular motion in these meteors.”

In the volume under notice the definitions given in this connection are as follow:—

“A cyclonic circulation in which the winds do not exceed force 10 is termed a ‘cyclonic storm,’ while a circulation in which the winds are of hurricane force, 11 to 12, is called a ‘cyclone.’”

According to the Beaufort scale, storm force is expressed by the number 11; while employing this scale, is it not illogical to define a circulation, in which the winds do not exceed 10, as a “cyclonic storm”?

The copious remarks which accompany the charts are interesting and instructive, and add greatly to the worth of the volume. M. W. C. H.

A TEXT-BOOK OF TROPICAL MEDICINE.

Tropical Medicine, Hygiene, and Parasitology. A Handbook for Practitioners and Students. By Gilbert E. Brooke. Pp. xvi+498. (London: Charles Griffin and Co., Ltd., 1908.) Price 12s. 6d. net.

THIS is a volume of the well-known medical pocket-book series, and corresponds in size and binding to Davies's “Handbook of Hygiene.” It is a book of five hundred pages, and is divided into four sections.

The first section deals with the hygiene of the tropics, and discusses climate, food, exercise, clothing, hygiene of the mouth, pregnancy, and infant feeding in the tropics. The information and advice given in this section are useful and practical. For example, in regard to alcohol the author is of opinion that while it is not absolutely necessary for a man in any climate, a small quantity well diluted is often beneficial in the tropics. Most experienced travellers will agree with this, since the debility and consequent want of appetite brought about by tropical heat renders the stimulating effect of alcohol more necessary in warm than in temperate climates. Three ounces of whisky in the twenty-four hours is stated by the author to be the maximum which should be taken by a man in health. This will be thought by many dwellers in the tropics to be a counsel of perfection, but certainly the advice is sound, practical, and necessary. In regard to mosquito-bite prophylaxis, Dr. Brooke recommends various external applications; but surely experience teaches that these are of little or no practical use. The best protection is a good mosquito net. The author, speaking of mosquito nets, rightly says that the net in common use is a snare and a delusion. The best plan certainly is to have a permanent mosquito-proof room, which can, if necessary, be rigged up with ordinary mosquito-netting at the cost of a few shillings. In this room, or part of a room, there should only be a bed, a table, and a lamp. If one has to

dine out where mosquitoes are numerous, a pair of Wellington boots may be found more productive of a calm, equable mind than the ordinary silk socks and pumps of fashion. Dr. Brooke seems to be of opinion that tropical medicine is something quite different from the medicine taught in the schools, and that no one can pretend to treat these diseases unless he has had special training. There seems to be too much made of this nowadays. Surely with a five years' curriculum it should be possible to teach a student the art of medicine sufficiently thoroughly to enable him to recognise a new disease when he comes in contact with it for the first time! A carpenter is not supposed to have made everything during his apprenticeship. He is taught the principles of his trade, and afterwards applies them to his daily work, whatever it may be.

The second section deals with medico-biology, and includes the classification of animal and vegetable parasites, notes on tapeworms, nematodes, mosquitoes, fleas, ticks, and snakes. Here also a great deal of useful information is compressed into some eighty pages; and there are several plates giving figures of the ova, larvæ, and worms most commonly met with. Of course, as is unavoidable in the compilation of a text-book, more or less trivial errors are apt to creep in, such as the name *Streptococcus pyogenes aureus*, or the assertion that *S. scarlatinae* is the cause of scarlet fever, or that the tsetse-flies act as hosts in the spread of *Piroplasma bigeminum*, and such-like slips of the pen; but these do not really take away from the general usefulness of the section.

The third section is devoted to the description of the etiology, symptoms, and treatment of tropical diseases. These are arranged alphabetically, which arrangement has little to commend it, especially as the author has tried his hand at nomenclature and evolved two new names for sun-stroke, Phœbism and Diathermasia! On the whole, the descriptions of the various diseases are clearly given and well illustrated. In a rapidly progressing subject such as that of tropical diseases is at present, it is scarcely possible for a text-book to be quite up-to-date. In the description of dengue, for example, there is no notice of the recent important work which has been done in the etiology of this disease. In Malta fever it is stated that the method of transmission of the disease is uncertain. That is not so. This was clearly established two years ago, when it was shown that Malta fever is carried from infected goats to man through the medium of milk. Since goats' milk was banished from the dietary this fever has practically disappeared from the English garrison in Malta. This fact should be placed in the forefront of the description, and everything else made subsidiary to it. Again, what is the use at the present day of writing that Manson considers the weight of evidence to point to its diffusion by air-currents rather than by food and water? This is an old speculation which ought to be decently buried and forgotten. Further, more than half a page, in the account of the same fever, is devoted to describing some experiments carried out by two naval surgeons. These experiments ought not

to have been made, for several reasons. These gentlemen had no right to risk their lives or health without sufficient reason while in the public service. It was unnecessary to carry out the experiments on man, as lower animals were available. Even if one or both had taken the disease, the experiments would have been useless, as they were living in the endemic zone and liable to take the disease naturally. What was the use, for example, of two non-immunes drinking urine from a case of Malta fever if they neglected in the first place to demonstrate that the urine contained the *Micrococcus melitensis*? As only one sample of urine in ten contains the cocci, it was ten to one against their taking the disease. Such thoughtless experiments ought not to be encouraged by being recorded in text-books as praiseworthy actions or serious attempts in the investigation of disease. With the exception of slight blemishes such as these, which, indeed, are inseparable from text-books, the descriptions of the various tropical diseases are good, and some are excellent. Especially is the description of the symptoms and treatment of these tropical maladies quite practical and useful.

The fourth section is taken up with practical hints in microscopy, photography, disinfection, examination of blood, &c. This part of the book contains much sound advice on the best microscopes and cameras for tropical work, on stains, staining methods, modes of preparing blood and tissues for examination, and should prove very useful to medical men in out-of-the-way places out of touch with books and laboratories.

The book concludes with several appendices on sanitary conventions, vegetable poisons of the tropics, how to collect flies, ticks, &c.

This text-book on tropical medicine can be confidently recommended to colonial surgeons and medical officers of the British and Indian Services as containing a vast amount of data from various sources, with practical hints from the author's personal experience and observation, which makes it an admirable *vade mecum* when the exigencies of travel render the carriage of several books impossible.

DAVID BRUCE.

A MONOGRAPH OF BRISTLE-WORMS..

A Monograph of the British Annelids. Vol. ii., part i. Polychæta, Nephthydidae to Syllidae. By Prof. W. C. McIntosh, F.R.S. Pp. viii+232+lxix plates. (London: Dulau and Co., 1908.) Price 25s. net.

WHEN Huxley was appointed professor in the Jermyn Street School of Mines, his first great scheme was the publication by Government of a zoological coast survey of Great Britain, and one of the first groups to be selected was this one of the Annelids. Unfortunately for biology, that scheme was never carried out, and the opportunity that presented itself some fifty years ago of obtaining State assistance for what was truly a State work has not recurred. Not only has the publication of systematic coastal work been left to isolated ventures, but many groups, and the Annelids among them, have been so little studied on our own coasts that the work of

naming any of the most common littoral species (except perhaps the lugworm) is out of all proportion to the value of its determination. Yet these Annelids are not only of great interest to the zoologist, but, as forming one of the chief foods for fish, they are among the most important factors in the welfare of our fisheries. The Ray Society and the Carnegie Trust are therefore to be congratulated on the issue of another section of this great monograph, which they have subsidised. Prof. McIntosh is known and read of all students of biology, and his unwearied devotion to this work, his wide knowledge, and long experience of these Annelids constitute him a master. He, perhaps of all men, was the only one who could write this work, and the completion of his monograph begun so many years ago is indeed a consummation devoutly to be wished. May he have the health and assistance necessary to that end.

The present instalment contains a systematic account of six families. Its most striking feature lies in the coloured plates drawn by the author's sister, the late Mrs. Günther, and the artist Miss A. H. Walker. These presentations of Phyllodocids, Hesionids, Nephthyds, and Syllids are most beautiful, and suggest many problems of coloration and of movement that are not referred to in the text. The fine green colour of many Phyllodocids tingeing even their egg-masses, the prevalence of segmental spots in most families, and the significance of varietal colorations, are subjects on which we possess very little organised knowledge, for if the systematic study of Polychæt Annelids has been neglected in this country, the bionomics and physiology of the groups have been left to a few Continental observers. It is to be hoped that the issue of this work will stimulate the study of the group in these directions.

There are two serious drawbacks to the value of this work which a little trouble could easily have obviated. If one wishes to find out what families, genera, and species are described in this part, there is no means of doing so except by wading through the text. A table of contents is not much to ask for, but it has been omitted, and as there is no index the labour of finding out what there is in the work is quite needlessly enhanced. The headings of the left-hand pages might well have given the family name under consideration instead of the species as at present. The second drawback is the binding of six extraneous plates right in amongst those proper to the part, sandwiched in between those illustrating two other families. These intrusive plates evidently belong to a later section of the work; yet we find no reference to their presence, and the confusion that is likely to arise ought to induce the council of the Ray Society to take some steps in order to avoid the repetition of, and if possible rectify, what we presume must be an oversight.

To turn from matters of editorial criticism, we are glad to see that Mr. Goodrich has given his skilled assistance and expert knowledge of the nephridia of these animals, so that these organs are adequately referred to and figured in the text. The references to other recent work on this subject show that not